UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,207	11/17/2000	Yonatan Pesach Stern	24614	5096

7590   02/21/2007

Martin D. MOYNIHAN
PRTSI, INC.
P.O. Box 16446
Arlington, VA 22215

EXAMINER
TRAN, QUOC A

ART UNIT	PAPER NUMBER
2176	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	09/714,207	STERN ET AL.
	Examiner	Art Unit	
	Tran A. Quoc	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 November 2006</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-19 and 21-38* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 7-19, and 21-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>08-25-2006</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is a **final** rejection in response to amendment filed on 11-20-2006.

2.   Claims 1-4, 7-19 and 21-38 are pending. Claims 5-6 and 20 are canceled.

3.   Claims 6, 26, and 28 have been amended. Claims 1, 19 and 23-25 are independent claims.

4.   Effective filing date 11-07-2000 and priority date is 06-16-2000.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

6.   **Independent claims 1-4, 7-19 and 21-38** are rejected under 35 U.S.C. 103(a) as being

unpatentable by Ferrel et al. US006199082B1- filed 07-17-1995 (hereinafter Ferrell), in view of

Cooperman US006377704B1 - filed 04-30-1998 (hereinafter Cooperman).

   Regarding independent claim 1, Ferrel teaches **method for automatic publishing**

data. Specifically, Ferrel discloses a multimedia publishing system (MPS) designed for an on-

line publication might automatically publication synthesize and prioritize content based on

different consumer preferences (as taught by Ferrell at col. 1, lines 54-55).

   In addition, Ferrel teaches **from said representation automatically analyzing the**

newspaper to decompose the predetermined layout of each page of the newspaper in the

original, existing format into said, plurality of blocks, each block representing an object;

converting each object to an internal publication format, said internal publication format identifying and preserving said internal structure of said blocks within said objects, said internal publication format furthermore preserving said layout as a relationship between said objects. Specifically, Ferrel discloses a multimedia publishing system (MPS) designed for an on-line publication might automatically publication synthesize and prioritize content based on different consumer preferences (as taught by Ferrell at col. 1, lines 54-55). Also, Ferrel discloses the MPS that includes content and design, which are stored as separate object, (i.e. the content is the text, and graphic of newspaper and the design is layout and style of that content), so that many different pieces of content can be viewed with the same appearance (Ferrel col. 8, lines 5-30). Also, Ferrel discloses the MPML (Multimedia Publishing Markup Language) converters for the Document Editor 188 support mapping styles applied to the text to MPML tags. For example, an author creates a document based on the MPS template. This template provides a set of predefined styles along with supporting macros. The author applies these styles to the text to identify the different elements of the document (headline, abstract, body text, and so forth). Only the predefined styles should be used. When the document is saved in MPML format, these styles are mapped to SGML tags by the MPML output converter. The result is a tagged document, which can later be parsed by the Viewer 202 (Ferrel col. 26. lines 5-50).

Using the broadest reasonable interpretation, the Examiner equates the claimed **internal publication format** as equivalent to a set of predefined styles along with supporting macros. The author applies these styles to the text to identify the different elements of the document (headline, abstract, body text, and so forth). Only the predefined styles should be used. When the

document is saved in MPML format, these styles are mapped to SGML tags by the MPML

output converter as taught by Ferrel.

Furthermore, Ferrel teaches **rendering said internal publication format to incorporate**

said objects said layout and respective internal structures in the final publication format.

Specifically, Ferrel discloses the styles contained in every style sheet are predefined by the MPS

authoring program, and has formatting commands unique to the MPS. In addition, markups

languages are well known in on-line networks identify portions of documents by embedded tags.

In an MPML document, there is one MPML tag per document portion and each tag is mapped to

a style that is found in a style sheet (Ferrel col. 63, line 25-40), also the MP system is device

independent in that the tagged content can be displayed with high quality on many different

devices. For example, a content provider can create a title just once, but the title can be viewed

on a VGA screen with one column, a printer with many columns, a small screen personal digital

assistant (PDA), an interactive television (ITV) system, a fax machine, or a notebook computer.

Different styles can be applied to each of these devices so that the displayed content is formatted

appropriately (Ferrel col. 62, lines 40-55).

Ferrel does not expressly teach, but Cooperman teaches **obtaining a scanned**

representation of said newspaper, said representation preserving said layout.

Specifically, Cooperman discloses optical character recognition systems (OCR) that is capable of

preserving detail of the input document and in particular the flow of text (reading order) within

the document. In particular, the present system is directed to a layout analysis system including

inset detection that can be used to extend the capability of an OCR package to more accurately

recreate the document being processed. In addition, such a system produces output data for a

word processor or a reading assistance device by preserving the reading order of the document to

facilitate edit ability and a close approximation of the original appearance of the document

(Cooperman col. 2, lines 40-55).

It would have been obvious to a person of ordinary skill in the art at the time the invention

was made to have modified the newspaper automatic publication method that taught in Ferrell, to

include a means of obtaining a scanned representation of said newspaper, said

representation preserving said layout as taught by Cooperman. One of ordinary skill in the art

would have been motivated to modify to provide an (OCR) that is capable of preserving detail

and layout of the input document (Cooperman col. 2, lines 40-55), and also provides the

advantages of online publication with an automatic synthesize and prioritize content based on

different consumer preferences and maximize time and human labor (as taught by Ferrell at col.

1, lines 54-56 and col. 2, lines 50-55).

Regarding independent claim 19, Ferrel teaches **a mark-up language distiller module**

for converting the newspaper from said original format to a mark-up language format,

wherein said mark-up language distiller module automatically analyzes the newspaper

data in said original, existing digital format to decompose the newspaper data into said

plurality of blocks, each block with said internal structure representing an independent

data object, each object having content and at least one attribute of the data, such that each

object is converted to said markup language format, said markup language format further

analyzing and preserving said structure. Specifically, Ferrel discloses the MPS that includes

content and design, which are stored as separate object, (i.e. the content is the text, and graphic

of newspaper and the design is layout and style of that content), so that many different pieces of

content can be viewed with the same appearance (Ferrel col. 8, lines 5-30). Also, Ferrel discloses

the MPML (Multimedia Publishing Markup Language) converters for the Document Editor 188

support mapping styles applied to the text to MPML tags. For example, an author creates a

document based on the MPS template. This template provides a set of predefined styles along

with supporting macros. The author applies these styles to the text to identify the different

elements of the document (headline, abstract, body text, and so forth). Only the predefined styles

should be used. When the document is saved in MPML format, these styles are mapped to

SGML tags by the MPML output converter. The result is a tagged document, which can later be

parsed by the Viewer 202 (Ferrel col. 26. lines 5-50).

Using the broadest reasonable interpretation, the Examiner equates the claimed **a mark-**

up language distiller and internal structure representing an independent data object as

equivalent to a set of predefined styles along with supporting macros. The author applies these

styles to the text to identify the different elements of the document (headline, abstract, body text,

and so forth). Only the predefined styles should be used. When the document is saved in MPML

format, these styles are mapped to SGML tags by the MPML output converter as taught by

Ferrel.

Furthermore, Ferrel teaches **a publisher server for converting the data from said**

mark-up language format to a final publication format, said final publication format

incorporating, as objects, said blocks with said internal structure, and further defining

interrelationships with said objects. Specifically, Ferrel discloses the styles contained in every

style sheet are predefined by the MPS authoring program, and has formatting commands unique

to the MPS. In addition, markups languages are well known in on-line networks identify portions

of documents by embedded tags. In an MPML document, there is one MPML tag per document

portion and each tag is mapped to a style that is found in a style sheet (Ferrel col. 63, line 25-40),

also the MP system is device independent in that the tagged content can be displayed with high

quality on many different devices. For example, a content provider can create a title just once,

but the title can be viewed on a VGA screen with one column, a printer with many columns, a

small screen personal digital assistant (PDA), an interactive television (ITV) system, a fax

machine, or a notebook computer. Different styles can be applied to each of these devices so that

the displayed content is formatted appropriately (Ferrel col. 62, lines 40-55), in addition Ferrel

discloses the production staff places everything on the publisher's server and releases it to be

copied to additional servers at the Microsoft Network data center (Ferrel col. 18, lines 25-30).

Using the broadest reasonable interpretation, the Examiner equates the claimed a **internal**

structure as equivalent to the styles contained in every style sheet are predefined by the MP

system authoring program as taught by Ferrel

In addition, Ferrel teaches **the computerized format comprising a plurality of pages,**

each page having a predetermined layout comprising a plurality of independently standing

data blocks, each block having an internal structure. Specifically, Ferrel discloses the MPS

that includes content and design, which are stored as separate object, (i.e. the content is the text,

and graphic of newspaper and the design is layout and style of that content), so that many

different pieces of content can be viewed with the same appearance (Ferrel col. 8, lines 5-30).

Also, Ferrel discloses the MPML (Multimedia Publishing Markup Language) converters for the

Document Editor 188 support mapping styles applied to the text to MPML tags. For example, an

author creates a document based on the MPS template. This template provides a set of predefined

styles along with supporting macros. The author applies these styles to the text to identify the

different elements of the document (headline, abstract, body text, and so forth). Only the

predefined styles should be used. When the document is saved in MPML format, these styles are

mapped to SGML tags by the MPML output converter. The result is a tagged document, which

can later be parsed by the Viewer 202 (Ferrel col. 26. lines 5-50).

Ferrel does not expressly teach, but Cooperman teaches **at least one source of newspaper**

data said source preserving original structure of the newspaper. Specifically, Cooperman

discloses optical character recognition systems (OCR) that is capable of preserving detail of the

input document and in particular the flow of text (reading order) within the document. In

particular, the present system is directed to a layout analysis system including inset detection that

can be used to extend the capability of an OCR package to more accurately recreate the

document being processed. In addition, such a system produces output data for a word processor

or a reading assistance device by preserving the reading order of the document to facilitate edit

ability and a close approximation of the original appearance of the document (Cooperman col. 2,

lines 40-55).

Using the broadest reasonable interpretation, the Examiner equates the claimed **newspaper**

data as equivalent to the input document as taught by Cooperman.

It would have been obvious to a person of ordinary skill in the art at the time the invention

was made to have modified the newspaper automatic publication method that taught in Ferrell, to

include at least one source of newspaper data said source preserving original structure of the

newspaper as taught by Cooperman. One of ordinary skill in the art would have been motivated

to modify to provide the capability of preserving detail and layout of the input document

(Cooperman col. 2, lines 40-55), and also provides the advantages of online publication with an

automatic synthesize and prioritize content based on different consumer preferences and

maximize time and human labor (as taught by Ferrell at col. 1, lines 54-56 and col. 2,

lines 50-55).

Regarding independent claims 23-25, the rejection of claim 1 is fully incorporated. In

addition, Ferrel teaches **preparing a list of text and/or graphic elements for each object.**

Specifically, Ferrel discloses the method of determining properties of each element, including

determining visibility (as taught by Ferrell at col. 26, lines 15-25), and overlap characteristics for

each graphic element within said object (as taught by Ferrell at col. 36, line 25-67, and at col. 38,

lines 30-45).

Regarding dependent claims 2-4, 10 and 21, the rejection of claim 19 is fully

incorporated.

Regarding claim 7, Ferrel teaches **wherein said layout is decomposed by classifying**

each object according to a category selected from the group consisting of an article, an

advertisement, a picture not otherwise associated with said article or said advertisement,

and general data. Specifically, Ferrel discloses the MPS that includes content and design, which

are stored as separate object, (i.e. the content is the text, and graphic of newspaper and the design

is layout and style of that content), so that many different pieces of content can be viewed with

the same appearance (Ferrel col. 8, lines 5-30).

Regarding claims 8-9, and 11, Ferrel teaches **wherein said object is constructed in**

said converting from content and at least one attribute of said object in said layout; object

is composed of a plurality of primitives, each primitive containing a portion of content and

an attribute, wherein each attribute is stored in an XML tag, and wherein at least one attribute describes a relationship between said primitives of said object. Specifically, Ferrel discloses the MPS that includes content and design, which are stored as separate object, (i.e. the content is the text, and graphic of newspaper and the design is layout and style of that content), so that many different pieces of content can be viewed with the same appearance (Ferrel col. 8, lines 5-30). Also, Ferrel discloses the <u>MPML (Multimedia Publishing Markup Language) converters</u> for the Document Editor 188 support mapping styles applied to the text to MPML tags. For example, an author creates a document based on the MPS template. This template provides a set of predefined styles along with supporting macros. The author applies these styles to the text to identify the different elements of the document (headline, abstract, body text, and so forth). Only the predefined styles should be used. When <u>the document is saved in MPML format</u>, these styles are mapped to SGML tags by the MPML output converter. The result is a tagged document, which can later be parsed by the Viewer 202 (Ferrel col. 26. lines 5-50).

Regarding dependent claim 12, wherein said rendering said internal publication format is performed according to a type of hardware device for displaying the final publication format (as taught by Ferrell at col. 62, lines 40-50).

Regarding dependent claims 13, wherein said rendering said internal publication format is performed only after a query from a specific hardware device is received (as taught by Ferrell at col. 24, lines 25-35).

Regarding dependent claims 14-17, the rejection of claims 23-25 are fully incorporated.

Regarding dependent claim 18, the rejection of claim 1 is fully incorporated. In addition, using the broadest reasonable interpretation, the Examiner reads claim 1 limitation cites

above, wherein each block representing an objects, and said logical relationships of said data between said blocks, which are the broader interpretation of the claim 18 limitation, and are similarly rejected along the same rationale.

Regarding dependent claim 22, the rejection of claim 19 is fully incorporated. In addition, Ferrel teaches a repository for storing said plurality of objects, and an image of the data, (as taught by Ferrell at col. 26, lines 30-50).

Regarding dependent claim 26, the rejection of claim 1 is fully incorporated. In addition, Ferrel teaches comprise at least one property selected from a group including multiple columns, titles, subtitles, images and image captions (as taught by Ferrell at col. 8, lines 35-40).

Regarding dependent claims 27-30, the rejection of claim 1 is fully incorporated. In addition, Ferrel teaches wherein said blocks rendered in said final publication format may be viewed in an order defined by the user (as taught by Ferrell at col. 10, lines 5-15).

Regarding dependent claims 31 and 35-36, the rejection of claim 1 is fully incorporated. In addition, Ferrel teaches wherein said data comprise new data and archive data, wherein said at least one source of data comprises a source of new data and new data (as taught by Ferrell at col. 59, lines 5-15).

Regarding dependent claims 32-33 and 37-38, rejection of claims 1 and 19 are fully incorporated. In addition, Ferrel teaches wherein said source of archive data comprise content microfilm data. For example, Ferrel discloses the MPS (Multimedia Publishing System) architecture maintains a clean separation between design information and the content to which that design will be applied, wherein the content takes the form of discrete objects, each of which

compose one unit of information, e.g., a story or a picture. These content objects are of well-

known and public data formats, and may be created using any tool that supports these data

formats. Content objects generally do not have formatting information encoded within them (as

taught by Ferrell at col. 7, lines 65-67).

Regarding dependent claim 34, the rejection of claim 1 is fully incorporated. In

addition, Ferrel teaches **Graphic User Interface (GUI)** (as taught by Ferrell at col. 33,

lines 40-45).

Response to Arguments

7.   Applicant's arguments filed 11-20-2006, with respect to the rejection(s) of claim(s) 1-4,

7-19 and 21-38 have been considered but are moot in view of the new ground(s) of rejection. To

address the amended portions the Examiner introduces Cooperman reference (see above

rejection for details). As for the un-amended portions, beginning on page 17 of 30 of the

REMARKS (hereinafter the remarks), Applicant argues the following issues, which are

accordingly addressed below.

Beginning on page 9 of 18 the Remarks (hereinafter the remarks), Applicant argues the

following issues, which are accordingly addressed below.

Regarding rejection of claims 1-4, 7-19 and 21-38, **the Applicant argues that Ferrel**

fails to teach converting data from one format to a different format. The examiner disagrees,

as discloses in the rejection above, Specifically, Ferrel discloses a multimedia publishing system

(MPS) designed for an on-line publication, automatically publication synthesize and prioritize

content based on different consumer preferences (as taught by Ferrell at col. 1, lines 54-55).

Also, Ferrel discloses the MPS that includes content and design, which are stored as separate

object, (i.e. the content is the text, and graphic of newspaper and the design is layout and style of

that content), so that many different pieces of content can be viewed with the same appearance

(Ferrel col. 8, lines 5-30). Also, Ferrel discloses the <u>MPML (Multimedia Publishing Markup</u>

<u>Language) converters</u> for the Document Editor 188 support mapping styles applied to the text to

MPML tags. For example, an author creates a document based on the MPS template. This

template provides a set of predefined styles along with supporting macros. The author applies

these styles to the text to identify the different elements of the document (headline, abstract,

body text, and so forth). Only the predefined styles should be used. When <u>the document is saved</u>

<u>in MPML format</u>, these styles are mapped to SGML tags by the MPML output converter. The

result is a tagged document, which can later be parsed by the Viewer 202 (Ferrel col. 26. lines 5-

50).

Using the broadest reasonable interpretation, the Examiner equates the claimed

converting data from one format to a different format as equivalent to a set of predefined

styles along with supporting macros. The author applies these styles to the text to identify the

different elements of the document (headline, abstract, body text, and so forth). Only the

predefined styles should be used. When <u>the document is saved in MPML format</u>, these styles are

mapped to SGML tags by the MPML output converter as taught by Ferrel.

In addition, Cooperman discloses optical character recognition systems (OCR) that is

capable of preserving detail of the input document and in particular the flow of text (reading

order) within the document. In particular, the present system is directed to <u>a layout analysis</u>

system including inset detection that can be used to extend the capability of an OCR package to

more accurately recreate the document being processed. In addition, such a system produces

output data for a word processor or a reading assistance device by preserving the reading order of

the document to facilitate edit ability and a close approximation of the original appearance of the

document (Cooperman col. 2, lines 40-55).

Using the broadest reasonable interpretation, the Examiner equates the claimed **converting**

data from one format to a different format as equivalent to optical character recognition

systems (OCR) that is capable of preserving detail of the input document from hard copy into

electronic document as taught by Cooperman.

Furthermore, the Applicant argues that **Ferrel fails to teach automatic analyzing a**

received original, existing document, such as newspaper or a microfiche carried document,

in such reverse engineer process. The examiner disagrees, as discloses in the rejection above,

Specifically, Cooperman discloses optical character recognition systems (OCR) that is capable of

preserving detail of the input document and in particular the flow of text (reading order) within

the document. In particular, the present system is directed to a layout analysis system including

inset detection that can be used to extend the capability of an OCR package to more accurately

recreate the document being processed. In addition, such a system produces output data for a

word processor or a reading assistance device by preserving the reading order of the document to

facilitate edit ability and a close approximation of the original appearance of the document

(Cooperman col. 2, lines 40-55).

Using the broadest reasonable interpretation, the Examiner equates the claimed **original,**

existing document, such as newspaper or a microfiche as equivalent to optical character

recognition systems (OCR) that is capable of preserving detail of the input document from hard

copy into electronic document as taught by Cooperman.

In addition, the Applicant argues that **Ferrel fails to teach automatic analyzing a**

representation to decompose the data in the received original, existing format into plurality

of objects. The examiner disagrees, as discloses in the rejection above, Specifically, Cooperman

discloses Cooperman discloses optical character recognition systems (OCR) that is capable of

analyzing, and inset detection an input document layout into produces output data for a word

processor or a reading assistance device by preserving the reading order of the document to

facilitate edit ability and a close approximation of the original appearance of the document

(Cooperman col. 2, lines 40-55).

In addition, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to have modified Cooperman's teaching to include a means of designed

for an on-line publication as taught by Ferrel, wherein a multimedia publishing system (MPS)

designed for <u>automatically publication synthesize and prioritize content based on different</u>

<u>consumer preferences</u> (as taught by Ferrell at col. 1, lines 54-55). Also, the MPS that includes

content and design, which are stored as separate objects, (i.e. the content is the text, and graphic

of newspaper and the design is layout and style of that content), so that many different pieces of

content can be viewed with the same appearance (Ferrel col. 8, lines 5-30).

In addition, one of ordinary skill in the art would have been motivated to modify to provide

the capability of preserving detail and layout of the input document (Cooperman col. 2, lines 40-

55), and also provides the advantages of online publication with an automatic synthesize and

prioritize content based on different consumer preferences and maximize time and human labor

(as taught by Ferrell at col. 1, lines 54-56 and col. 2, lines 50-55).

For at least all the above evidence, therefore the Examiner respectfully maintains the rejection of claims **1-4, 7-19 and 21-38**, and should be sustained at this time.

Conclusion

8.   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a):

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc A. Tran whose telephone number is 571-272-8664. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Herndon R. Heather can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quoc A. Tran
Patent Examiner
2007-02-17

WILLIAM BASHORE
PRIMARY EXAMINER